

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

|  |             |                      |                                     |                  |
|--|-------------|----------------------|-------------------------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                 | CONFIRMATION NO. |
| 10/648,847   | 08/26/2003  | Mark H. Machina      | APTI:066                            | 3853             |
| 7590<br>ROSSI & ASSOCIATES<br>P.O. Box 826<br>Ashburn, VA 20146-0826 |             | 05/30/2007           | EXAMINER<br>CLEMENT, MICHELLE RENEE |                  |
|  |             |                      | ART UNIT                            | PAPER NUMBER     |
|  |             |                      | 3641                                |                  |
|  |             |                      | MAIL DATE                           | DELIVERY MODE    |
|  |             |                      | 05/30/2007                          | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/648,847

### Applicant(s)

MACHINA ET AL.

### Examiner

Michelle (Shelley) Clement

### Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of group I, claims 1-15, in the reply filed on 3/19/07 is acknowledged. Claims 16 and 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 12F. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Art Unit: 3641

Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

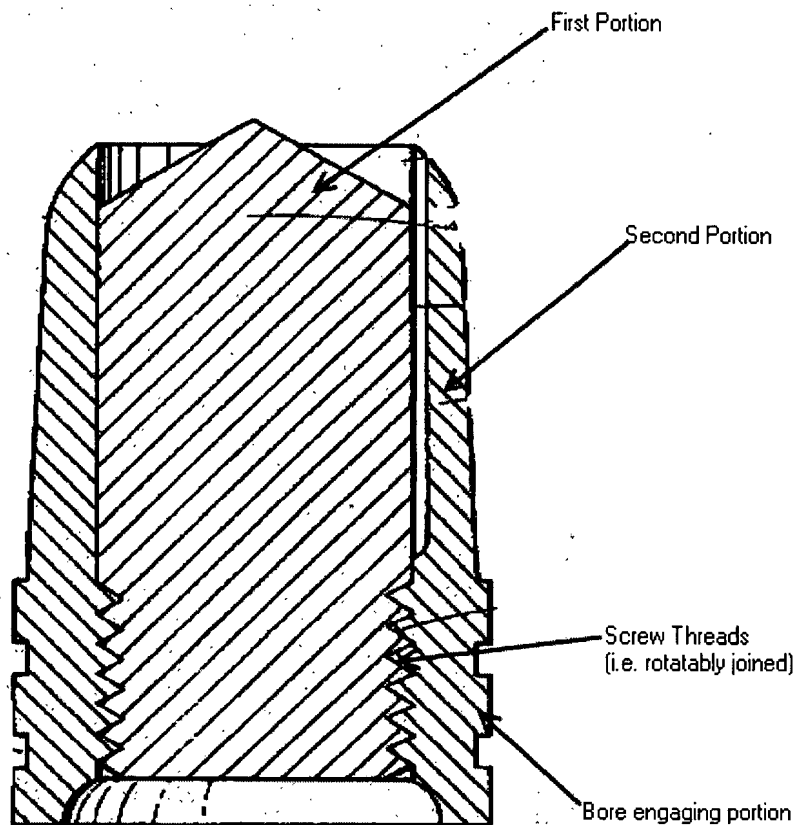
***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Winter (US Patent # 5,160,805). Winter discloses a projectile for firing from a firing device comprising a first portion and a second portion extending from the first portion, wherein the first and second portion are rotatable joined and wherein at least one of the first and second portions is configured (i.e. has the ability to) engage a bore of the firing device. The projectile being an apparatus for displacing material from a target and including a firing device for firing the projectile and a cartridge adapted (i.e. having the ability) (reference 12) for chambering in the firing device. The second portion has less mass than the first portion (it is made of a lighter material) (column 5, lines 5-10). The second portion has a bore engaging portion. The first portion is frangible (tungsten is a known frangible material).

**FIG. 5**

6. Claims 11-7 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Denis (US Patent # 4,977,834). Denis discloses a projectile for firing from a firing device comprising a first portion (references 8, 9 and 10) and a second portion (reference 6) extending from the first portion, wherein the first and second portion are rotatably joined (reference 12) and

Art Unit: 3641

wherein at least one of the first and second portions is configured (i.e. has the ability to) engage a bore of the firing device. The projectile being an apparatus for displacing material from a target and including a firing device for firing the projectile and a cartridge adapted (i.e. having the ability) (reference 1) for chambering in the firing device. The second portion has less mass than the first portion (it is made of a lighter material) (column 2, lines 54-55). The second portion has a bore engaging portion. The first portion has break-initiators (i.e. is frangible). The first portion comprises a core and a plurality of fins extending outwardly from the core. The percussive mass includes longitudinal break-initiators (reference 46) defining fins (see figure 16) which facilitate the opening out of the percussive mass at the moment of impact (i.e. the fins are frangible and have the ability to break and spread radially outwardly from the core as the first portion penetrates a target) (column 9, lines 15-23). A leading portion of the fins is sloped at an angle (See Figures 5, 12A, 14, and 16).

7. Claims 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Blanco (US Patent # 4,301,733). Blanco discloses a projectile for firing from a firing device, the projectile being an apparatus for displacing material from a target and comprising a firing device and a cartridge adapted for chambering in the firing device wherein the cartridge carries a projectile comprising a front portion (reference 1) and a rear portion (reference 13) extending from the front portion, wherein the front portion comprises a core and a plurality of fins extending outwardly from the core (Figures 1 and 3). Wherein the fins are frangible which have the ability to break and spread radially outwardly from the core as the first portion penetrates a target (the front portion is made of a material that disintegrates upon impact with a target, the rotation imparted on the projectile will inherently cause the disintegrated particles to spread radially upon

Art Unit: 3641

disintegration). Leading portions of the fins are sloped at an angle. The rear portion has less mass than the front portion. The rear portion has a bore engaging portion.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blanco as applied to claim 8 above. Although Blanco does not expressly disclose the front and rear portions being rotatably connected, Blanco discloses the exact same connection between the two portions as applicant does. Given that there is nothing that would prevent the two portions from rotating with relation to one another, with the right amount of force the two portions would rotate with respect to each other.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3641

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michelle (Shelley) Clement  
Primary Examiner  
Art Unit 3641